



Status of Renewable Energy Transmission Planning Process (RETPP) Proposal

Udi Helman
Principal, Markets & Infrastructure Division

RETI SSC Meeting, San Diego
January 19, 2010

Design of the RETPP Planning Framework

- Comprehensive, cost-effective planning requires a statewide assessment of transmission needs
 - With mechanisms to update and adapt the plan over time
- Access to renewable resources will be established as a new criterion for determining need for transmission upgrades
- Effective integration and consolidation of ISO planning processes
 - Shift from a project proposal approach to a comprehensive plan approach

Design of the RETPP Planning Framework (cont.)

- Effective integration and consolidation of ISO planning processes (cont.)
 - Merger of significant LGIP upgrades and overall renewable interconnection planning
 - Other changes to treatment of the existing reliability and economic TPP categories corresponding to the new requirements of the RETPP
- Rights and obligations for renewable transmission project development
- ISO decision-making parts of RETPP will be Order 890 compliant

RETPP proposal has 3 phases

- Phase 1 – Formulate statewide conceptual 33% RPS transmission plan with CTPG, including joint projects
- Phase 2 – Refine conceptual plan to arrive at 33% RPS needs assessment for ISO BAA portion of statewide plan
 - Stakeholders may offer additions to Phase 1 plan
 - ISO will perform studies to establish final needs
 - Seeking ISO Board approval Dec. 2010 of needed elements, not projects
- Phase 3 – Receive & assess concrete project proposals – for ISO Board approval of ISO BAA projects Spring 2011
 - Projects for conditionally approved lines may proceed with engineering, etc., & will receive cost recovery if project does not get final approval.
 - Economic project submission opportunity

Phase 1 – RETPP will adopt a statewide framework for developing a conceptual transmission plan

- Collaborative effort with CTPG provides framework for statewide conceptual transmission plan, this effort will:
 - Seek agreement on input assumptions and scenarios
 - Result in conceptual state-wide transmission plan
 - Include stakeholder process
- ISO will conduct additional analyses to address cases or scenarios not included in CTPG study plan if necessary
- More details in today's CTPG presentation

Phase 2 – Refining the Statewide Conceptual Plan to Arrive at Final ISO Determination of Needs

- Phase 2 includes –
 - Four-month period for stakeholders to comment on the conceptual plan
 - Limited project submission window
 - Process for ISO to select and rank alternative transmission elements under different scenarios
 - Changes to evaluation of economic projects
 - Rules for inclusion of LGIP upgrades

Phase 2 – Stakeholder Comment Period

- Stakeholder comment opportunity April – July 2010
- Provision of additional technical information on transmission elements in the conceptual plan that may affect the specifications of those elements in the final plan
- Alternative interconnection points for in-state or interstate transmission lines
- Additional information that could cause the ISO to revise some of its study assumptions
- *Project proposals submitted could be reviewed but will not be granted any rights to build if elements are used*

Phase 2 – Limited Project Submission Window

- Concurrent with Comment Period
- Submission of Proposals for Merchant Projects
- Submission of Proposals for Location-Constrained Resource Interconnection Facilities

Phase 2 – Planning Methodology

- Select and rank transmission elements for purposes of renewable generation interconnection and integration
 - Ranking criteria and scenario analysis will support both refinement of conceptual plan and Category 1 or 2 designations
- Appropriately size the identified transmission elements to reflect future generation interconnection (“right-sizing”) and/or to facilitate meeting renewable integration operational requirements
- Provide information that can demonstrate the cost-effectiveness of the set of transmission elements in the Phase 2 Final Plan

Phase 2 – Process for Evaluating Economic Project Proposals

- ISO will conduct congestion studies after Phase 2 renewable interconnection planning (Final Plan) is complete
- Based on this need assessment, or independent evaluation, economic project proposals can be submitted in the Phase 3 project submission window

Phase 2 – Proposed Treatment of LGIP-Driven Upgrades

- Many LGIP related transmission upgrades will be significant enough to warrant consideration from the larger perspective of the RETPP, rather than the narrower perspective of the current LGIP
- As a starting point, the ISO will distinguish between LGIP network upgrades that are considered necessary for evaluation within the RETPP and those that aren't:
 - LGIP Network Upgrades that are new transmission lines requiring new rights of way and are 200 kV and above and have an estimated cost exceeding \$50M
 - LGIP Network Upgrades that are new substations and are 500 kV and above and have an estimated cost exceeding \$50M

Phase 2 – Proposed Treatment of LGIP-Driven Upgrades

- These line facilities will require a CPCN and are expected to have a lead time of 5 to 7 years
 - Analysis within the RETPP should not significantly delay the commercial operation date
- The location of a new 500 kV substation should be approved as part of a long-term statewide plan
 - The choice made can significantly influence future bulk system transmission expansion options and costs
- LGIP upgrades already in the LGIA phase of the process will not be required to go through the RETPP

Phase 3 – Overview

- Phase 2 Final Plan approved by ISO Board will include:
 - Transmission elements needed for renewable energy access
 - PTO proposals for reliability projects
- Phase 3 submissions will include:
 - Proposals to build Phase 2 final plan elements (with right of first refusal for PTOs with service territories)
 - Potential economic projects not reflected in Phase 2 final plan (all parties)
- ISO Board will consider and approve Phase 3 submissions starting in March 2011.

Phase 3 – Renewable Access Elements

- PTOs with service territories have right of first refusal and obligation to build Phase 2 plan elements
 - Must exercise ROFR within 90 days
 - After 90 days ISO will accept proposals from other parties
 - PTOs will have obligation to build elements where no party offers acceptable proposal
 - ROFR and obligation to build for each PTO applies to facilities wholly or partly with its territory
 - For elements within more than one PTO territory, affected PTOs may negotiate a joint project arrangement
 - Independent transmission company or another PTO may negotiate a joint project arrangement with designated PTO
- ROFR & OTB are consistent with existing provisions for reliability and interconnection upgrades and economic projects identified by ISO

Phase 3 – Economic Project Proposals

- Any party (PTO or non-PTO) may identify and propose a project not identified in the Phase 2 final plan that it deems to have economic benefits
- ISO will evaluate economic project proposals against the upgraded transmission system as specified in the Phase 2 final plan
 - ISO reliability and congestion studies performed in Phase 2 will provide basis for parties to identify potential projects
- Depending on the number and complexity of such submissions, ISO may evaluate and propose to the Board starting in March 2011.

Integrating the RETPP, TPP and LGIP

- To achieve the “comprehensive planning” objective, ISO intends to present one annual transmission plan to the ISO Board for approval
- The Phase 2 Final Plan will serve this purpose, and will therefore include:
 - PTO reliability projects, per current TPP
 - LGIP-related elements (renewable and non-renewable) of significant size and system impact
 - Elements identified from 2008-09 TPP request window submissions that have renewable access benefits
 - Any additional renewable integration transmission elements, e.g., to access resources for balancing intermittent resources

Approach for integrating the processes

- The TPP reliability assessment process timeline for 2011 will be compressed so that PTO reliability projects can be included in the Phase 2 final plan by December 2010
- Economic projects from the 2008-09 request windows will be considered in Phase 3
- The Phase 2 comment period (April-July 2010) will be open for submission of merchant projects, LCRIF upgrades and PTO reliability projects
- Upgrades needed for LGIP projects (serial and cluster) will either be considered within the RETPP Phase 2 process, or addressed within current LGIP if not of significant size or system impact.

ISO 2011 Transmission Planning process will be compressed

- January 29 - Post 2010 transmission plan
- February 1 – Draft study plan posted
- February 5 – Stakeholder review of study plan
- February 12 – Stakeholder comments due
- February 19 – Study plan finalized
- March – Statewide conceptual plan published

2010 transmission plan presented to ISO Board

- April – Reliability studies initiated
- May – Statewide final plan published

ISO 2011 Transmission Planning process will be compressed (continued)

- July 1 – ISO posts reliability results
- August 2 – PTOs submit reliability projects
- September 15 – Stakeholder meeting
- October - Statewide plan posted
- October – Stakeholder meeting
- December 16 – Statewide plan to ISO Board

Next Steps

- January 19 – Stakeholder comments due on Draft Final Proposal (33RPS.com)
- January/February – Tariff Development Stakeholder Process
- February 11, 12 – Board Decision on RETPP
- End of February – Tariff Filing with FERC